15; U.S. Navy--24 [2] (no date) 1944 Formosans
116, 166, 177, 221

"In normal times population movements which entail permanent shifts in residence or occupation have been (a) from farms to urban centers; (b) from older residences to new industrial sites and into war industry; (c) subsidized movements of both farm and industrial labor to the East Coast valley; (d) compulsory movement of aborigines from scattered mountain settlements to villages established by the police; (e) movements of families and individuals returning to Japan; and (f) movements of traders, merchants, and seasonal labor to and from the China coast before 1938."

15: U.S. Navy --24 [3] (no date) 1944 Formosans
116, ~~166~~, 369, 464, 177.36 Japanese
636.36

"The industrial centers at Keelung, Shinchiku, Takao and Karenko have attracted many voluntarily. The better paid technical and supervisory personnel are Japanese, but the common labor is Formosan-Chinese drawn from local rural communities. There is evidence that the creation of a number of new air establishments has necessitated the development of servicing communities near them, either at the fields' borders or in nearby villages. The development of a town at Toshien, just north of Takao, is the most important example of a 'war town' on the west coast. Karenko's new industries and the hinterland development of villages on a Japanese pattern and with Japanese names are examples of a more permanent new development."

15: U.S. Navy --24 [5]
116, 166, 486, 659, 177.48
636.48

(no date) 1944

Formosans
Japanese

"The movement of Formosan-Chinese or Japanese into the aborigine territory is supposed to be strictly regulated. Permits must be had for any forest operations which take laborers into the area for logging or for camphor extraction. Likewise, the movements of aborigines who wish to leave the territory for business or sightseeing (educational) visits to towns and villages is carefully checked by the Japanese police. The police stations are small centers for trade and local administration through which most such traffic must pass. Roads, paths and the pushcar lines converge on these centers.

Movement from the western and northern settled regions to the isolated East Coast is susceptible of complete control. The town of Suo is the last important settlement at the northeast. Koshun is the last important settlement at the extreme south. Through these two towns pass all round-the-island motor traffic. (A road crossing the southern peninsula from Shajo eastward may now cross above Koshun.) All persons entering the territory through these points are expected to be registered for police purposes.

Some foot traffic (confined largely to bearers of supplies and messengers for the interior police stations) passes across the island from the Taichu-Hori district over the Noko mountain ridge to Karenko. It is improbable that Formosan-Chinese, singly or in small groups, should attempt to cross the mountains on foot unless armed or escorted by armed police."

15: U.S. Navy--32 [10] (no date) 1944 Formosans
116, 166, 464, 177.16 Japanese
636.16

"The labor shortage is especially acute on the east coast where major industrial developments are planned for the next few years. To alleviate the shortage a bureau has been set up which attempts to engage workers on the west coast, send them around to the east, and there settle them in advantageous places.

In January, 1939, an employment bureau organized in Karenko (capital ¥200,000), brought 500 labor immigrants from the west coast of the island and put them to work in the Japan Aluminum Company's factory. They were given land (1/2 acre to each house) and were required to raise hogs, for there is a shortage of pork on the East Coast. A government bureau plans to continue this resettlement work."

V. MIGRATORY MOVEMENTS

167 From the beginning of the seventeenth century to the end of the nineteenth century immigrants from the Chinese coast increased the population in Formosa. However, due to prohibitive measurs against immigration taken by the Japanese, the major increase after 1895 was caused by excess of births over deaths. In the post-war years, particularly when the Nationalist Government abandoned the China Mainland, a vast number of civilians and troops came to Formosa, swelling the population by about 20 per cent. It was estimated that in 1952 there were about 9,700,000 people on the island; of this number one-fifth were Mainlanders.[13]

166 Internal migration is largely limited to rural people moving to urban areas. Because of familial and local ties farmers rarely move unless they plan to change their occupation. Moreover, because of the lack of frontier lands, farmers do not gain by moving to other areas unless they change their livelihood. To the farmers, migration means departure from rural life and activities. As a result, most people tend to stay in or near the locality in which they were born. About 60 per cent of the 857 heads of households surveyed by the Joint Commission on Rural Reconstruction were born in the village in which they now live, 17 per cent were born in other villages in the same township (chen), and 10 per cent were born in other townships in the same

13. Arthur F. Raper, Rural Taiwan--Problem and Promise, Taipei, JCRR, 1953, p.290, Appendix B contributed by Profs. Ruey Yih-fu and Chen Shao-hsin of National Taiwan University.

166 hsien.[14] The few rural dwellers who moved from the townships surveyed went to the larger cities or to the east coast. Two townships on the east coast showed a relatively large immigration[15] during the period 1937-52; most of the newcomers were from the western and southern parts of the island. If employment opportunities in the urban areas are improved, it is believed that there will be a great migration from every township.[16]

In recent years, industrialization has been another factor which influenced a number of people to move from rural areas to urban and industrial areas. Cities having more than 100,000 inhabitants in 1920 accounted for 4 per cent of the total population; while in 1952, large cities accounted for 21 per cent. If we consider that the increase in total population during 1920-52 was 120 per cent -- 3,800,000 to 8,200,000 -- the increase in urban population which amounts to more than 420 per cent is of extreme importance and indicates how rapidly urbanization is taking place in Formosa.

VI. VITAL STATISTICS

163 ### A. Births

The birth date of Formosa has been constant and high. During the period 1920-53, the number

14. Ibid., p. 205; the remaining 13 per cent are probably from other hsien and provinces.
15. Raper, loc. cit.
16. Ibid.

52:Barclay S-5 (nodate)1954 ADl Formosa ADl

Prefectures, and in Taipei. A thin belt of level land along the east coast was only freshly settled; people were extremely sparse in the interior region (see also Fig. 2). Separating the Aborigine Territory removes the greatest variation in terrain and land use. On this basis the more populous sections of the island can be roughly distinguished, though only in terms of Prefectures (which were not evenly settled throughout). To facilitate this comparison, the density of total population (per square kilometer) in each Prefecture is expressed in the final columns of Table 19 as a percentage of the density over the entire island with the Aborigine Territory excluded.

One can get a quick glance at the total effects of migration by examining the disposition of people among the smallest civil divisions at two separate dates. This information is prepared, for the years 1920 and 1935, in Table 20. The intervening period covers

TABLE 20

TAIWAN. TOTAL POPULATION BY SIZE OF CIVIL DIVISION, 1920 AND 1935

Excluding the Aborigine Territory

Size of Civil Division	*1920*		*1935*	
	Population	*Civil Divisions*	*Population*	*Civil Divisions*
	A. Numbers			
Under 10,000	765,772	116	1,244,749	130
10,000-20,000	1,980,510	141	2,262,691	118
20,000-30,000	409,149	19	606,831	22
30,000-40,000	166,543	5	119,785	3
40,000-50,000	47,921	1	469,151	7
Over 50,000	239,342	2	384,973	2
Total Island	3,609,237	284	5,088,180	282
	B. Per Cents			
Under 10,000	21.2	40.8	24.5	46.1
10,000-20,000	54.9	49.6	44.5	41.8
20,000-30,000	11.4	6.7	11.9	7.8
30,000-40,000	4.6	1.8	2.3	1.1
40,000-50,000	1.3	0.4	9.2	2.5
Over 50,000	6.6	0.7	7.6	0.7
Total Island	100.0	100.0	100.0	100.0

Sources: *Census of 1920, Descriptive Report*, Appendix, Table 8.
Census of 1935, Statistical Tables, Table 3.

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fifteen years of uninterrupted growth in the island's population. This is a short span, but it is the longest one for which appropriate figures exist. Before 1920 the territorial divisions were not the same, and for the census of 1940 no full reports have been published.

Apparently, from Table 20, the fact that there were more people in 1935 made little difference in their mode of settlement. At both dates more than two-thirds of all people (here including Taiwanese and all other groups) were living in places of less than 20,000 in size. Some of the larger civil divisions shifted upward from one group to a higher one; this is to be expected from the mere fact of general population increase. What is surprising is that the biggest cities—and as late as 1940 Taiwan boasted only three larger than 100,000—failed to advance substantially over the rest of the island. Subsidiary centers of less than 50,000 population made the most headway in relation to other places. A certain amount of administrative reorganization enters into these figures, since evidently a few of the minor units were split up into still smaller ones. But these changes were confined to units of the smallest size, and did not encompass many people. Viewed in entirety, migration therefore did not have a marked effect in redistributing the population growth that was in progress among the Taiwanese.[5]

Economic activities had changed so little, however, that migratory movements could hardly have been large. Besides, no large areas of new lands were available to farmers after 1900. Most of the additional space brought under cultivation since that time was converted to agricultural use within the settled area. Expansion of agriculture along these lines did not open opportunities of wider settlement.[6] In the absence of empty lands, there was little for peasant farmers to gain in changing residence unless they also changed their livelihood. In general, if they remained agriculturists it was advantageous also to remain in localities where they were well known, where their families were well established, and where they did not suffer the invidious treatment commonly accorded to strangers.

[5] Differences in natural increase, which might have hidden the effects of some migration in these figures, bore almost no relation to the differences in actual population growth between civil divisions.

[6] The exception to this rule was the rugged east coast of Taiwan. There the authorities brought in "colonists," first Japanese and later Taiwanese, to establish special settlements in the limited plains area for cultivation of sugar and other crops. Though making up a large part of the population later found in this region, this migration was small and of a very special nature.

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MIGRATION AND THE GROWTH OF CITIES

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On the basis of the previous chapters we should know in advance some of the reasons why people moved. If movement was difficult and uncommon within agriculture, then permanent migration was presumably a matter of going to new jobs. Occupational movement and spatial movement were two interconnected parts of the same process. This meant, for the society, a shift in its economic base; for individuals, it amounted to a change in status, together with exit from rural life and activities.

Bearing in mind that the migrant population was small, we can try to discover where these people went and who they were. For the aggregate of those who crossed local boundaries, both origins and destinations can be found by estimating the balance of persons who moved into or out of each civil division.

This measure is suited to detecting various types of migration. In its results much depends on the types of areas and the period of time chosen for making the estimates. Districts and Municipalities are the places that will be used here; they are small enough not to hide very many moves of more than ten or twenty miles. The smallest time interval is set by the fact that census data give the best indication of total population change by place (i.e., the difference in the people counted from one census to the next in each unit of enumeration). This fixes the period to be used at five years. It is probably sufficient to cancel out some short-term migration and give a certain amount of weight to permanent shifts of residence.

But intercensal population change represents the effects of both net migration and the net amounts gained by births and lost by deaths or natural increase. Since only a tiny fraction of births or deaths went unregistered, they give a good basis for taking out the component of natural increase. The residual term that remains from intercensal population change can therefore be regarded as "net internal migration" in any given civil division.[7]

From 1925 to 1930, net migration viewed in this fashion did not vary greatly among Districts. It is interesting, however, to see the regional groupings of Districts, in terms of per cents of their Tai-

[7] That is, it is practically zero for the island as a whole. Discrepancies are possible for local areas if the chances of dying have been affected by whether or not some of their people were migrants, or if deaths were registered in a previous place of residence. There is no direct evidence available as to the error from those sources. Because Taiwan's population records were of high standard, and because migration was not heavy, it seems safe to assume that these distortions are minor in any particular place. The procedure used for estimating net migration may, however, increase the amplitude of errors in the residual values.

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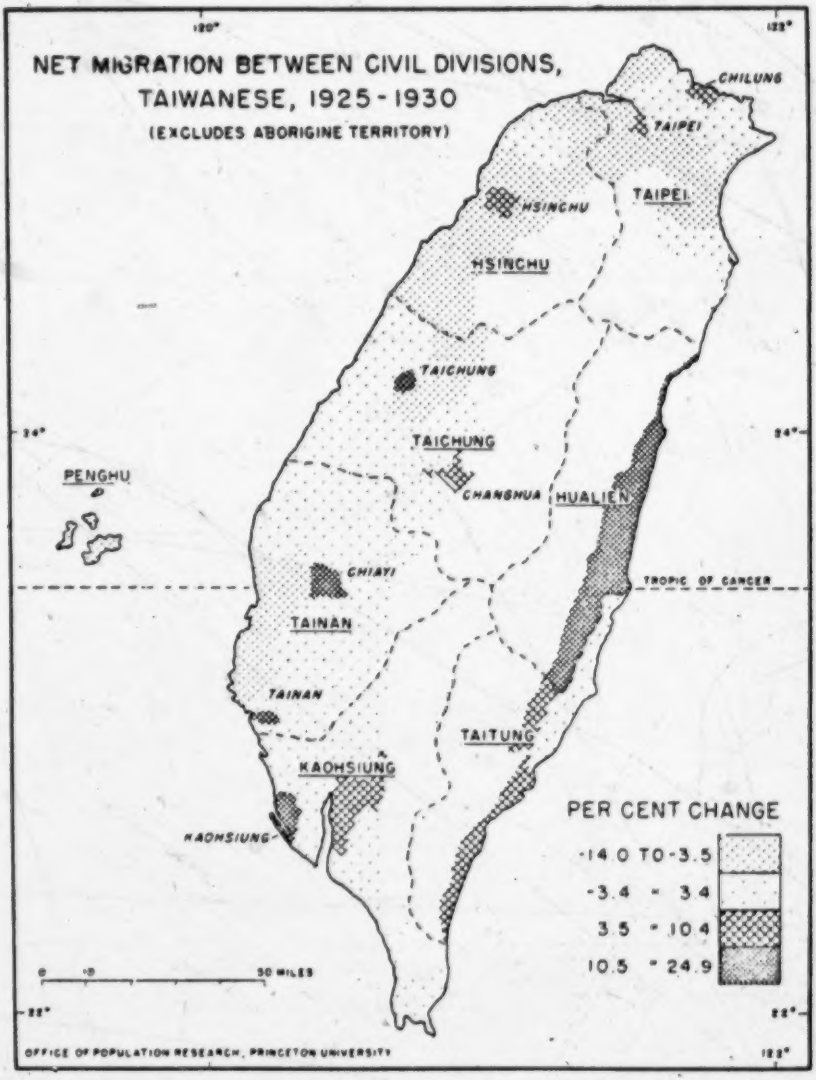

Fig. 17. Net Migration of Taiwanese between Civil Divisions, 1925-1930.

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wanese inhabitants received or lost in this way from 1925 to 1930 (see Fig. 17).[8] These groupings divided the rural areas into two parts—a zone of out-migrant Districts in the north, and a more or less neutral region having almost no increase or loss through migration. A process of rapid settlement was beginning in the habitable parts of the eastern coast, where the authorities and a few private companies encouraged people from other Districts to go. This settlement was carried on partly through government design, and was not entirely spontaneous. It grew rapidly from a small start, but did not shift large numbers of people.

These transfers of people were extraordinary. The only other noteworthy exceptions to near-immobility over the rest of the island were cities. On the map these appear as the several isolated points with relatively high gain in migrants.[9] They were interspersed in rural areas of migration deficit, suggesting that much of the movement covered only the short distance from one civil division to the next.

The same data used for Fig. 17 yield more information in terms of the relation of intercensal change with natural increase and net migration. Fig. 18 illustrates the pattern of association that holds in either case, taking each District and Municipality simply as a unit, equally weighted. Against total population change as the standard of comparison, the percentage of natural increase varied from District to District more or less at random, and within a narrow range. Net migration, on the other hand, contributed most of the variation in population change from one civil division to another. The gist of Fig. 18 is summarized in Table 21, this time with each civil division weighted by the number of persons. In a somewhat different way, Table 21 reinforces what we have just learned about the components of population change: natural increase was nearly the same in all quartile groupings of places according to total population growth. Only net migration varied consistently with total change.

[8] Strictly speaking, ratios of estimated migrants to 1925 population. The Aborigine Territory has been excluded in these data, as it was only in the process of being "pacified" at this time; the ratios therefore show the total area illustrated in Fig. 17 to have a net out-migration, presumably because some people moved into the fringes of the interior area as it was gradually subjugated.

[9] In addition, part of one of the Districts was marked by exceptional growth among its neighbors due to the influence of a city that it contained. This was P'ingtung City, slightly to the east of Kaohsiung. It was elevated to a Municipality in 1932 and separated from the surrounding District.

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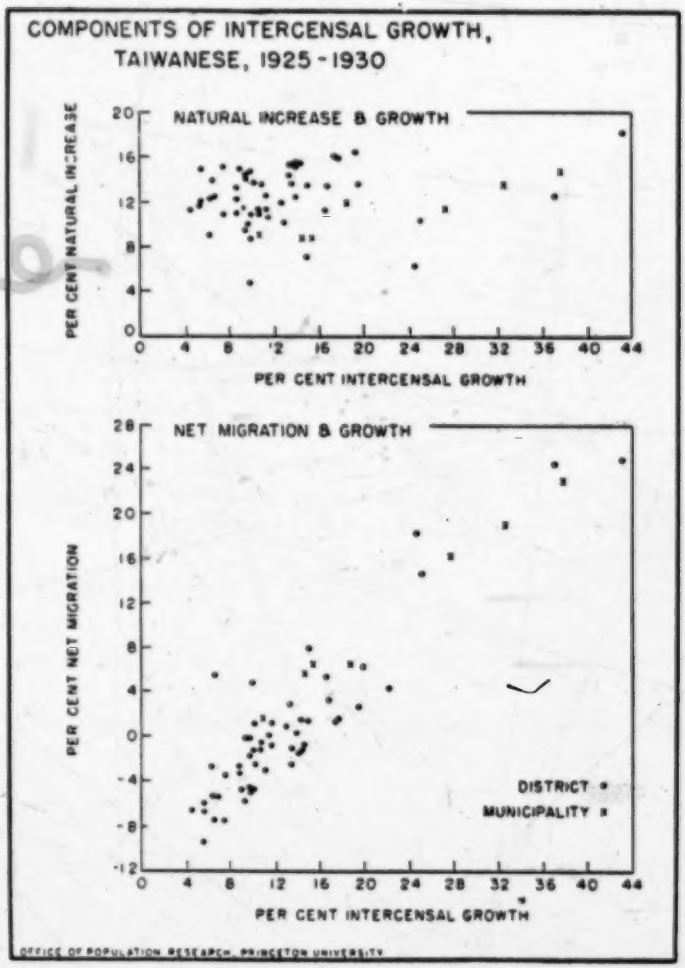

Fig. 18. Net Migration and Natural Increase by Civil Division, Related to Intercensal Growth of Population, 1925-1930.

The residual estimates of net migration above indicate that city populations gained the most from migration. This fact does not of itself imply that they gained the largest numbers of migrants, for we have not yet established that the cities were large enough next to the rural population to have such weight. All that these data reveal about the migrants is, in an aggregate sense, the places of origin and destination. For some idea of the numbers of people involved,

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TABLE 21

NET INTERNAL MIGRATION OF TAIWANESE, 1925-1930

By Districts, Grouped in Quartiles According to Total Intercensal Change. With Municipalities Shown Separately*

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	Per Cent Intercensal Change	*Per Cent Natural Increase*	*Per Cent Net Migration*
First Quartile	6.2	12.4	—6.2
Second Quartile	9.5	12.1	—2.6
Third Quartile	12.7	13.1	— .5
Fourth Quartile	17.3	13.9	3.3
Municipalities	19.1	10.3	8.9

* Percentages are ratios based on population of 1925 in each civil division.
Sources: *Census of 1925, Statistical Tables*, Table 1.
Census of 1930, Statistical Tables, Tables 1 and 2.
Vital Statistics, yearly volumes, 1926-1930.

and of the proportion of migrants who went to cities, we should rather deal directly with those who migrated.

The census reports for 1930 contain a special table showing persons born in a Prefecture other than the one in which they were enumerated—i.e., who had travelled across a prefectural boundary at some time after birth. This material is not in sufficient detail to establish the broad pattern of migration illustrated above,[10] but forms a valuable supplement to our estimates. In particular, it supplies a fuller answer to the question of relative drawing power between country and city.

Very few Taiwanese shifted residence across prefectural boundaries—obviously fewer than those who moved across District boundaries. The ones who did are a specially selected sampling of all people who moved. Most changes of residence in an agrarian society may be expected to be over short distances. These involve the least break with the past and exposure to unfamiliar conditions. They contain much "normal" movement of people having nothing to do with social change, for they are often bound closely to stable local

[10] It is, for example, an independent source of corroboration for the general spatial pattern of migration shown above. With it we can locate those migrants whose travels happened to cross prefectural boundaries (and who survived to the census date) according to their place of destination. By this criterion, the places of highest immigration are mostly the same as those shown by the measure of "net migration" above in the text. These census data lack, however, any information about the District of origin of the migrant population, which is just as essential to know.

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• 116 customs.[11] Since the Prefecture in Taiwan was a fair-sized geographical unit, much of this short-distance movement regularly occurred within these boundaries and would never come to light in such coarse tabulations. The rural Districts receiving most migrants from other Prefectures were, not unnaturally, those which lay on the border of an adjoining Prefecture.

The growth of each Prefecture through migration was therefore strongly conditioned by this fact. Cities were not so affected. Unless they were located near the edge of their Prefectures—and none was situated at a boundary—they had less chance of receiving short-distance migration from another Prefecture than did their rural hinterland.

Every Municipality in 1930, however, had a larger proportion of inter-prefectural migrants in its population than the remainder of its own Prefecture (see Table 22). These migrants, of course, were not necessarily people who had entered within a definite period of time, but those who had ever migrated. The east-coast Prefectures (Taitung and Hualien), which were non-urban, had the largest proportion of people from other Prefectures; but we have already seen that they were exceptional cases.[12] Significantly, the attraction of cities for people of other Prefectures tended to favor males more than that of their surrounding areas. In Hsinchu Prefecture (which on balance steadily lost migrants), the difference is greatest of all: the sex ratio of migrants to Hsinchu City was 167, to outside the city 72 (see Table 22).

These facts are put into better focus in Table 23. When migration data of this type cover a complete area, they have the special virtue of enabling one to count the migrants by place of origin as well as place of destination. Part A in Table 23 more nearly corresponds to the residual approach that was adopted above. The column next to the number of in-migrants shows their proportion among all residents; the final column gives the proportion of all in-migrants who went to cities. At the same time when 23.5 per cent of all inter-prefectural migrants had gone to cities, the cities themselves held only 10 per cent of all Taiwanese. A more appropriate comparison than over the entire island is to examine the cities of each Prefecture

[11] As, e.g., the "marriage migration" in certain countries. Cf. Davis, K. (1951), pp. 111-114.

[12] And Hualien contained a growing city of moderate size, which was made a Municipality in 1940.

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TABLE 22

INTER-PREFECTURAL MIGRANTS IN TAIWAN, 1930

Taiwanese Residing in Prefecture Other Than That of Birth, Enumerated in Rural Districts and Cities

	A. Rural Districts				*B. Principal Cities (Municipalities in 1930)*				
		Migrants from Another Prefecture (i.e., Born in Other Prefecture)				*Migrants from Another Prefecture (i.e., Born in Other Prefecture)*			
Prefecture	*Total Taiwanese Residents*	*Number*	*% of All Residents*	*Sex Ratio*	*Total Taiwanese Residents*	*Number*	*% of All Residents*	*Sex Ratio*	*Name of City*
Taipei	588,165	18,443	3.1	95	147,620	8,395	5.7	124	Taipei
					51,337	3,353	6.5	145	Chilung
Hsinchu	611,145	6,989	1.1	72	39,361	928	2.4	167	Hsinchu
Taichung	943,314	36,247	3.8	111	39,431	5,040	12.8	106	Taichung
Tainan	989,591	21,678	2.2	100	76,073	5,101	6.7	110	Tainan
					47,615	5,114	10.7	103	Chiayi
Kaohsiung	552,243	24,985	4.5	121	45,288	15,698	34.7	127	Kaohsiung
Taitung	53,684	7,411	13.8	140					
Hualien	72,103	25,670	35.6	136					
P'enghu	55,936	554	1.0	—					
Total Island	3,866,181	141,967	3.7	—					

Source: *Census of 1930, Prefectural Volumes*, Table 30 in each.

separately, where their drawing power stands in clearer contrast to that of their surrounding rural area.

Part B of Table 23 is an interesting supplement to the information already at hand. The deficit standing of Hsinchu is more conspicuous here than in Fig. 17, for the other Prefectures retained most of their own migrants inside their boundaries. P'enghu Islands, in addition, had lost relatively more people to other parts of Taiwan than any other Prefecture. These islands experienced disastrous storms and rural poverty for many years, and had no adequate economic base for many people to follow pursuits other than farming. Through the years P'enghu supplied an unbroken stream of people to Taiwan proper, most of them going to Kaohsiung City.

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TABLE 23

TOTAL SURVIVING MIGRANTS BETWEEN PREFECTURES, AND THOSE WHO WENT TO CITIES*

Taiwanese Enumerated in 1930 Whose Place of Residence Was Different from Place of Birth

	A. *By Prefecture of Destination* Resident in Prefecture, Born Elsewhere			B. *By Prefecture of Origin* Born in Prefecture, Resident Elsewhere		
Prefecture	*Number Who Migrated*	*% In-Migrant of All Persons Resident in Each Prefecture*	*% of the In-Migrant Who Went to Cities*	*Number Who Migrated*	*% Out-Migrant of All Persons Born in Each Prefecture*	*% of the Out-Migrant Who Went to Cities*
Taipei	30,191	3.9	38.9	28,665	3.6	19.2
Hsinchu	7,917	1.2	11.7	91,360	12.4	16.3
Taichung	41,287	4.2	12.2	16,569	1.7	20.6
Tainan	31,893	2.9	32.0	19,950	1.8	27.4
Kaohsiung	40,683	6.8	38.6	9,719	1.7	26.0
Taitung	7,415	13.8	–	2,066	4.3	3.4
Hualien	25,650	35.6	–	1,681	3.5	6.1
P'enghu	544	1.0	–	15,570	21.9	74.7
Total Island	185,580	4.3	23.5	185,580	4.3	23.5

* People living in boats are excluded.
Source: *Census of 1930, Prefectural Volumes*, Table 30 in each.

Movement to Cities: The Rate of Growth

These census materials above all emphasize one important fact: cities were the outstanding recipients of people from the rest of the island. The data regrettably can be used to demonstrate the case in only a limited way. The limitations are, however, of a nature that make this testimony an understatement—the total number of migrants to cities was much larger than merely those who had crossed the borders of a Prefecture. Lacking further data directly for the people who moved, we may find out more about them at their destinations as members of the urban population in Taiwan.

Since these several cities took such a large share of all migrants, they must have grown more rapidly in population than the rest of the island. The Municipalities were only a part of all the cities and towns in Taiwan, for the distinction was one of administrative convenience. Not all had equally developed economic services. They are

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a makeshift way of distinguishing urban places from rural Districts. Many subsidiary market towns, for example, must be overlooked for lack of data.

But in a population that was predominantly rural, these cities were the most "urban," the farthest removed from traditional peasant agriculture. Under the watchfulness of the Japanese, a town could not enlarge its economic importance for the rest of the island very far before it was given regular municipal administration. Hence we may treat them as representing the most extreme departures from rural conditions to be found in Taiwan, and can proceed to find out how far they deviated from the rest.

In 1932, two more cities were raised to municipal rank. The earlier and later population figures for all nine that were Municipalities in 1935 have been sorted out from the respective census reports, and appear in Table 24. It is clear that the cities of Taiwan were not great metropoleis. These nine were the largest, and many Westerners would regard only the foremost among them (Taipei) as being urban. One cannot gainsay their importance to Taiwan: they differed consistently enough from the rest of the island not to be lightly dismissed.

One distinction that is obvious in Table 24 is in the rate of growth. Though the cities varied considerably among themselves, every one increased its Taiwanese inhabitants more than the entire island did. Most cities maintained steady rates of growth, and therefore tended to keep their differences with the others.

The data are condensed and plotted on a logarithmic scale in Fig. 19, so as to contrast the rates of increase of city and non-city Taiwanese and Japanese. The inequalities in growth stand out clearly. Those cities that were expanding more slowly are likewise the ones that had relatively fewer migrants in the data above. They did not outgrow the non-city population by much of a margin, either in Taiwanese or Japanese. The differences in increase persisted over the entire recorded period, and carried over into the later years of accelerated economic growth. Indeed, from these data on population redistribution one could scarcely guess that the tempo of economic life had changed after 1935. Whereas these same cities had held 10 per cent of all Taiwanese in 1920, they contained only 14.7 per cent as late as 1940. For all their growth, cities did not greatly surpass the increase of all Taiwanese.

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TABLE 24

POPULATION OF TAIWANESE AND JAPANESE IN NINE MAJOR CITIES AT SUCCESSIVE CENSUS DATES, 1915-1940*

	1915	1920	1930	1940	Ratio: 1940/1920
TAIWANESE					
Taipei	98,495	108,107	147,620	221,602	2.0
Chilung		33,692	51,337	69,578	2.1
Hsinchu		28,951	39,361	51,060	1.8
Taichung	18,444	22,230	39,431	64,884	2.9
Changhua		32,810	40,747	54,741	1.7
Tainan	56,297	62,115	76,073	122,173	2.0
Chiayi		31,392	47,615	80,828	2.6
Kaohsiung		27,153	45,288	96,588	3.6
P'ingtung		18,420	28,917	46,961	2.6
Total, All Cities		364,890	516,389	808,415	2.2
Total Taiwanese		3,466,507	4,313,681	5,510,259	1.6
JAPANESE					
Taipei	37,974	45,211	67,687	91,550	2.0
Chilung		11,898	18,541	24,815	2.1
Hsinchu		2,649	5,102	7,504	2.8
Taichung	6,817	8,817	13,214	16,300	1.8
Changhua		786	1,977	2,977	3.8
Tainan	9,708	12,140	14,955	16,654	1.4
Chiayi		5,445	8,575	9,960	1.8
Kaohsiung		8,840	15,437	28,336	3.2
P'ingtung		3,112	4,814	6,747	2.2
Total, All Cities		98,898	150,302	204,843	2.1
Total Japanese		164,266	228,281	312,386	1.9

* Cities not yet formed before 1935 have been reconstituted for previous years according to their 1935 boundaries from the detailed census tables. Cities changed after 1935 have been adjusted to 1935 boundaries.

Sources: *1915 Population Register* } (Both of these volumes contain the census fig-
1920 Population Register } ures for minor civil divisions.)
Census of 1930, Statistical Tables, Tables 1 and 2.
Census of 1940. (Figures secured from the Gazette of the Taiwan Government-General, April 22, 1941.)

Japanese on the whole had stronger preferences for the same cities as did Taiwanese. But the functions of urban growth were not the same in the two groups. Taiwanese moved to cities as the most promising alternative to farming. Japanese, coming from outside to city and countryside alike, held technical and professional positions in

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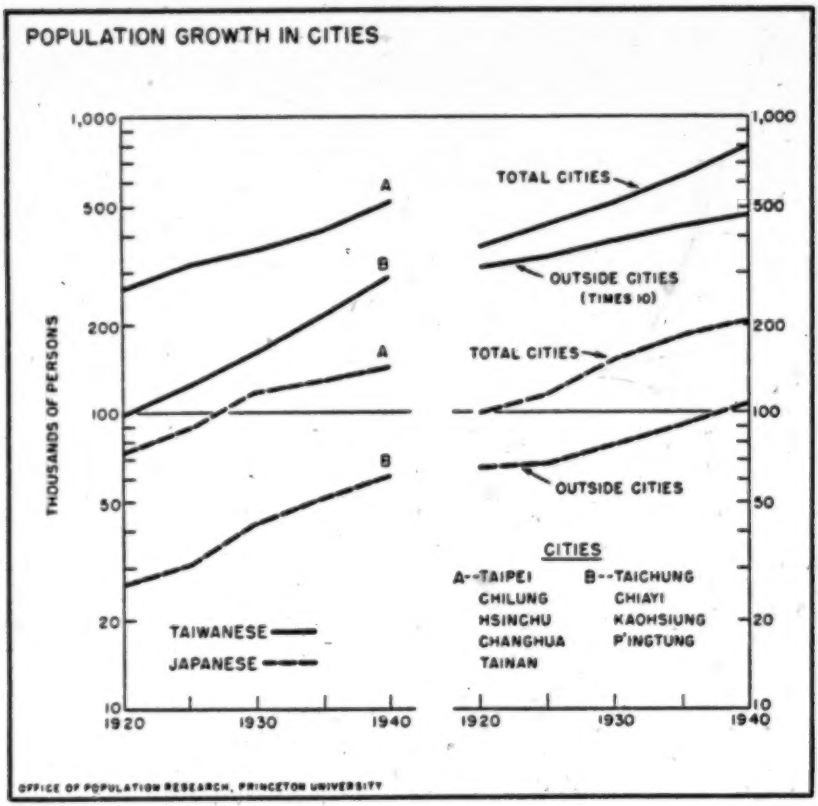

Fig. 19. Growth of Population in Major Cities of Taiwan, 1920-1940. Taiwanese and Japanese.

both places. They certainly esteemed urban more than rustic life; but work of a similar nature was also available to them outside the cities. For them the place of residence had less influence on their type of livelihood.

Ethnic Composition of Cities

The growth of cities depended on only a small part of all Taiwanese to supply the necessary migrants. It was not so with the Japanese. In a sense, the majority of them were migrants, having been born outside of Taiwan. More important, however, nearly two-thirds of all Japanese took up residence in cities and presumably stayed there (see Table 25). They found an urban setting most advanta-

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hsiung and Chiayi had not a single ward with as high as 90 per cent of its population Japanese. For Taiwanese, on the other hand, Taipei consisted neither more nor less of mixed wards than the other cities. In all, at least nine-tenths of the Taiwanese population of every city stayed in districts in which less than a majority of the inhabitants were Japanese.

The Taiwanese in Cities

Of all Taiwanese, so few went to cities that one is prompted to ask whether there were not some special factors present restricting the size of this migration. The effects of such a selective process over many years should produce differences in the characteristics of persons living in cities and of those living outside.

Since few if any newcomers had an opportunity to take up agriculture in the cities, a prominent feature of cityward migration was a movement to new work. To the extent that it was, one would expect that the migrants were the types of persons who usually undertook new occupations in Taiwan—for example, men rather than women, primarily in the ages of young adulthood. If the migrant population had been limited to these categories, cities with large proportions of migrants in their populations must have had disproportionate numbers of young men as compared with the rest of the island. Such a tendency has characterized rapid urbanization elsewhere.

In addition, cities frequently offer opportunities for employment that are considered superior to those found in the countryside. This is especially true of many agrarian societies, where rural poverty sometimes reaches extremes that make the meanest of urban jobs seem attractive. Where such conditions exist, movement to cities very often serves to drain off large numbers of men in young working ages who have lost or overcome their attachment to farming.

In 1935, these effects of age and sex selection were hardly perceptible in Taiwan's urban population taken as a whole. The age composition of all their males combined was nearly the same as the rural population (Table 29). Surprisingly, urban females likewise had almost the same age structure as those outside of cities. Hence, there could have been no sweeping dislocation of persons of different age and sex groups as a result of urbanization in Taiwan.

There are special circumstances in which it is not hard to imagine some movement of single individuals in an agrarian society; this has

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TABLE 29

AGE AND SEX COMPOSITION OF TAIWANESE, INSIDE AND OUTSIDE OF NINE MAJOR CITIES, 1925 AND 1935

Per Cent of Total Population in Selected Age Intervals, Male and Female

Age	Males		Females		Males per 100 Females	
	Inside	*Outside*	*Inside*	*Outside*	*Inside*	*Outside*
			1925			
0–14	36.5	40.2	37.5	40.0	101	105
15–39	44.1	40.6	39.5	37.6	116	113
40–64	17.8	17.4	19.5	18.8	95	96
65+	1.6	1.8	3.5	3.6	47	52
Total	100.0	100.0	100.0	100.0	104	104
			1935			
0–14	41.0	43.2	41.1	42.9	103	103
15–39	41.6	38.5	39.0	37.0	110	107
40–64	15.9	16.5	16.8	16.8	97	101
65+	1.5	1.8	3.1	3.3	50	57
Total	100.0	100.0	100.0	100.0	103	103

Sources: *Census of 1925, Statistical Tables*, Table 3.
Census of 1935, Statistical Tables, Table 7.

been known to occur in the form of contractual servitude by children, of young men (though not frequently young women) shifting to non-agricultural employment, and of movement by old persons to reside with emigrant kin. But it is inconceivable that these deviant events might have occurred jointly in chance coordination so as to reproduce the rural age structure so closely in cities. Such a migration as this could have been possible only if many people travelled to cities in family units and not as isolated individuals. A great many migrants therefore must have moved merely because they were members of migrant kinship groups.[20]

This situation did not hold with equal force in all cities. Variations in composition among separate cities were as great as the distinction between city and non-city. Assuming the age group 15 to 39 among males to be the most responsive to new opportunities for

[20] Estimates for the age composition of the *migrants* lend weight to this supposition. Survivors to 1935 of people who were already in cities in 1925 can be estimated at every age by subtracting the deaths that one would expect of them; the amount by which these survivors fail to account for the people actually found in cities in 1935 gives a fair idea of the persons gained through migration at each age. Though migrants measured in this way were somewhat concentrated in young adult ages, there were also impressive numbers in younger and older ages.

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TABLE 30

DIFFERENCES IN AGE AND SEX COMPOSITION OF TAIWANESE BY CITY, 1935

Cities	Per Cent 15-39 of all Taiwanese Males	Sex Ratios 15-39	Sex Ratios all Ages	Growth of City: Ratio of Taiwanese Population 1940/1920
Taipei	41.8	106	98	2.05
Chilung	42.4	112	103	2.07
Hsinchu	38.2	101	100	1.76
Taichung	43.2	115	107	2.92
Changhua	39.0	102	100	1.67
Tainan	40.6	110	105	1.97
Chiayi	42.2	112	105	2.58
Kaohsiung	42.8	120	110	3.56
P'ingtung	43.5	118	108	2.55
Total, All Cities	41.6	110	103	2.22

Source: *Census of 1935, Statistical Tables*, Table 7.

employment, we can use this group to summarize the differences (see Table 30). The cities of rapid growth—i.e., with relatively large proportions of immigrants—were the cities with more young men. Cities that grew faster did so in part by attracting more men in young working ages, and thus separated many of them from normal family life. Significantly, the age composition of females was nearly the same in *all* the individual cities, and thus was similar in each to rural communities.

The non-rural character of Municipalities in Taiwan, therefore, did not of itself make for non-rural age structure, but the same factors that were behind the more rapid growth of some cities tended to draw selectively from the population of different ages outside cities. One should always bear in mind that the greatest of the differences in Table 30 are moderate when considered alongside societies in which urban growth has been associated with sweeping modernization.

Something in addition can be learned about the particular characteristics of separate cities from the nature of economic activities in each. One single census table of persons with occupations was published in 1930 for individual cities, with the males of all ethnic groups lumped together. Cities were farthest removed of any civil

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TABLE 31

INTER-CITY DIFFERENCES IN OCCUPATIONAL COMPOSITION

Per Cent of Occupied Males in Selected Types of Occupation in Each of Seven Municipalities, 1930
All Nationality Groups

Cities	*Manufacturing*	*Commerce*	*Transportation*	*Government*	*Agriculture*	*Other Occupations*
Taipei	26	30	10	18	6	10
Chilung	16	21	23	9	4	27
Hsinchu	21	25	10	13	20	11
Taichung	23	28	10	19	14	6
Tainan	28	28	13	18	5	8
Chiayi	22	29	10	12	20	7
Kaohsiung	24	19	20	11	13	13
Total Seven Cities	24	27	13	15	9	12

Source: *Census of 1930, Statistical Tables*, Table 40.

divisions from rural conditions. Nevertheless, large blocs of Taiwan's urban population still supported themselves by farming. Only three Municipalities in 1930 had as few as one-twentieth of their working males engaged in agriculture. It is small wonder that these cities had failed to show symptoms of advanced urbanism in other respects.

Other types of employment in these cities also had certain special features. Government administration in Taipei, transshipping of seaport cargoes in Chilung and Kaohsiung, and sugar processing in Taichung and Tainan were reflected as important activities in their share of all male employment. These figures, pertaining to 1930, reveal nothing of the intensified industrial activity in these cities in the succeeding decade. They are the only available indication in demographic terms of the peculiarities of individual cities. In any event, we are less interested in these peculiar elements than in the relations between types of employment and urban settlement among Taiwanese. Since Table 31 does not show Taiwanese separately, it is affected by differences in the proportions of Japanese and in their work among the various cities. Hence the information, while illuminating, is less useful than one might wish.

More information is available for the population of all seven cities combined. By means of some estimation, we can find the occupational

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anese usually had subordinate positions. Nevertheless, it seems conclusive that by moving into cities Taiwanese were able to narrow the gap that separated their forms of livelihood from those of the Japanese.

The ethnic composition of occupied persons (appended to Table 32) indicates how the differences in occupational structure among these ethnic groups were weighted in the urban population. Taiwanese, of course, predominated in all lines except in government service and professional activities. Keeping these coveted positions in their own hands was one of the ways in which Japanese were able to live side by side with the rest of the population and avoid the pressure of competition.

Chinese nationals ("Other Nationalities" in Table 32) in these cities also appeared in a few types of work far more than in the working population as a whole. Their specialties were of an opposite kind: many worked as laborers in small manufacturing enterprises and as longshoremen, accounting for their large share of all "Manufacturing" and "Transportation" workers.

TABLE 33

OCCUPATIONAL DISTRIBUTION OF TAIWANESE MALES REPORTING AN OCCUPATION, INSIDE AND OUTSIDE MAJOR CITIES, 1905, 1920, 1930

	1905		1920		1930	
	*Inside**	*Outside*	*Inside*†	*Outside*	*Inside*‡	*Outside*
Agriculture	2.3	72.1	13.2	71.9	13.1	74.0
Fishing	.6	2.9	1.2	2.3	2.1	2.0
Mining	28.4	5.4	1.1	1.4	2.1	1.3
Manufacturing			27.1	6.9	22.8	5.9
Commerce	37.7	6.4	28.9	6.4	29.1	8.2
Transportation	10.4	1.9	11.2	2.8	13.7	2.8
Govt. & Prof.	5.6	1.7	6.7	1.9	6.4	2.3
Other	15.0	9.6	10.6	6.4	10.7	3.5
Total Occup.	100.0	100.0	100.0	100.0	100.0	100.0

* Comprises the cities of Taipei, Taichung, and Tainan. The boundaries for Taipei in this tabulation were smaller than the city as subsequently organized.

† Cities of Taipei, Taichung, and Tainan, with the same boundaries used at later census dates.

‡ Cities of Taipei, Chilung, Taichung, Tainan, Chiayi, Kaohsiung.

Sources: *Census of 1905, Detailed Tables, Prefectural Volume*, Table 17.
Census of 1920, Prefectural Volume, Table 16.
Census of 1930, Statistical Tables, Table 39.

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MIGRATION AND THE GROWTH OF CITIES

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Finally, the role of migration in social change can be clear only if we can make comparisons at different points of time. Occupational profiles of city and non-city working males are available in not quite the same form for three separate dates. The census reports of 1905 and 1920 each included a table of occupied persons in three cities (Taipei, Taichung and Tainan). Placed next to the corresponding figures in 1930 (Table 33), these early data are reasonably similar in all three years.

Not all of the same cities are included, and so the occupational distributions for cities alone do not stand close comparison with each other. One's attention is therefore drawn to the structure of occupations *outside* the cities involved. In Table 33, it appears that by removing the small group of urban working persons from the total population of Taiwanese, one in effect also removes most of the diversification in employment over time, and consequently a large share of the social changes that occurred in Taiwan. In other words, the new activities that resulted from Japanese occupation remained sealed up in the few urban centers. The Taiwanese population outside of these cities remained essentially as agrarian as at the beginning of Japanese rule.[22]

Even if as centers of innovation we did not consider Taiwan's cities important, a study of migration would have made them so. Permanent migration was rare among Taiwanese; but of those who migrated, a large proportion went to a few cities. Even though these cities were not growing fast enough to enlarge their share of all Taiwanese very substantially, they did the greatest part in redistributing the population.

The real significance of these shifts of residence arose from the fact that they were also shifts in activities. For the most part withdrawal from agriculture meant exit from rural communities. People departed every year to large towns or cities that had some provision for more diverse kinds of livelihood. It was primarily in these centers that the Japanese fostered modern enterprises and developed a need for labor. Migration was one of the forms of the response to

[22] Obviously, since more cities are represented in the 1930 figures, the figures themselves are biased and there is some chance of bias in the conclusion that we have drawn. By taking occupied men of all ethnic groups, the same comparison can be made based on the *same three cities* at all dates. This is possible because the table for all ethnic groups was published for each city separately (cf. Table 31, above). The result is the same, in that the data indicate no change in occupational structure outside even these three cities.

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these new opportunities for employment. It steadily brought more Taiwanese into contact with the modern side of the Japanese economic program.

Yet even though movement to the cities did widen the horizons of a few Taiwanese, it was surrounded by circumstances that tended to minimize this effect. The familial character of the migration made the break between country and city less sharp than it might have been. Removal to a city did not expose migrants very readily to whatever new influences were there. These were all dominated by Japanese, who kept most of their innovations to themselves and erected barriers against free intercourse with the rest of the population.

Urban growth therefore did not promote general social change among the Taiwanese. It removed into cities those who were to feel the strongest effects of contact with these alien elements. Migration thus helped to absorb the modern aspects of economic development so that they did not intrude into the affairs of rural communities.